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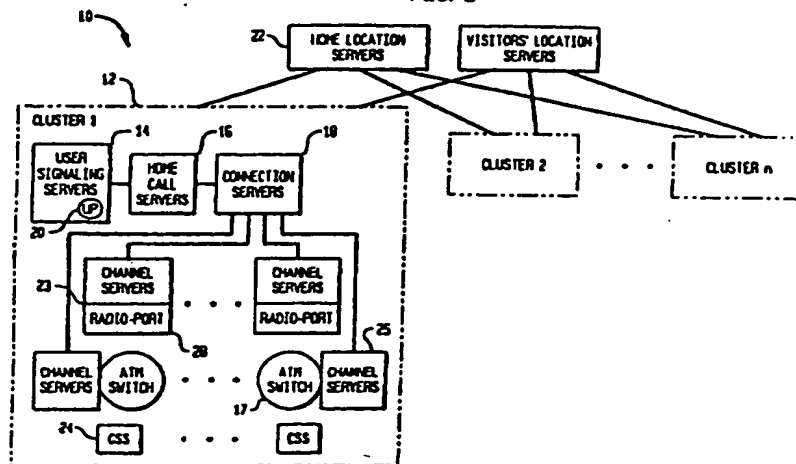Amherst, Massachusetts 01002, (US)

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(54) Based migrating user agents for personal communication services

(57) The present invention is a user process that resides in network nodes to act as an agent for the mobile terminals in PCS environments. The user process handles all negotiation and complex signaling functions for the user, thus reducing the amount of signaling traffic that must travel over the valuable air interface. To achieve low call establishment times the user process is migrated as users move. Three embodiments of mechanisms for migrating the user process are disclosed. The NAIVE approach enables the amount of data size to be transferred to be optimized, leading to low overhead. This approach also provides flexibility when migrating across heterogeneous environments. A second alternative, termed the TERN approach, is promising for cases when the program is compute intensive and asynchronous migration is essential. The last approach considered, Condor, provides high reliability in the form of checkpointing, but incurs a high migration delay and has high memory requirements for the network processors.

FIG. 1

EP 0 762 789 A3

EUROPEAN SEARCH REPORT

European Patent
Office

Application Number

EP 96 30 5930

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	LA PORTA T F: "DISTRIBUTED CALL PROCESSING FOR PERSONAL COMMUNICATIONS SERVICES" IEEE COMMUNICATIONS MAGAZINE, vol. 33, no. 6, 1 June 1995 (1995-06-01), pages 66-75, XP000545327 ISSN: 0163-6804	1-5,8, 17-19	H04Q7/24 H04Q7/38
A	* page 69, left-hand column, line 29 - page 73, left-hand column, line 61 *	6,7,13, 22	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

H04Q

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	27 July 1999	Palencia, C